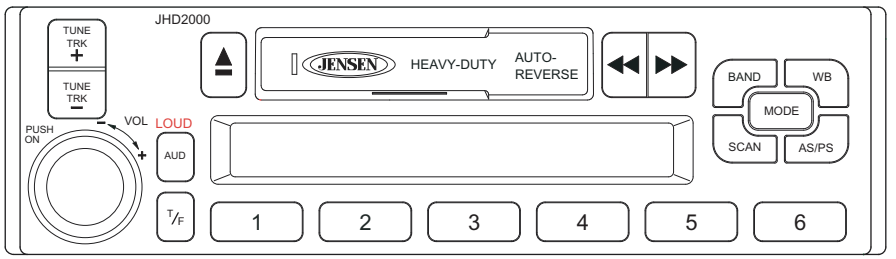
JENSEN

HEAVY-DUTY

JHD2000



AM/FM RADIO WITH AUDIO CASSETTE PLAYER, WEATHER BAND AND QUARTZ CLOCK.

OWNERS MANUAL

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OPERATING INSTRUCTIONS

①. POWER ON-OFF/VOLUME CONTROL(PUSH ON/VOL)
Press and release this button to turn the unit on or off. When on, rotate the control clockwise to increase the volume level. If the ignition switch is on, the radio will also automatically turn on when a cassette tape is inserted.

②. VOLUME CONTROL(VOL)
To increase the volume level, rotate the vol control clockwise. Vol : will appear and the volume level will be shown on the display panel from a minimum of vol:0 to a maximum of vol:40. To decrease the volume level, rotate the vol control counter clockwise. The display will automatically return to the normal indication 5 seconds after the last volume adjustment or when another function is activated. This control is also used in conjunction with the AUD button (3) to adjust the bass, treble, balance and fader levels as described in④,⑤,⑥and⑦.

③.AUD CONTROL BUTTON
This button is used to select the audio funtion(bass,treble,balance,fader or volume). Pressing the AUD button accesses the desired function,whose setting is adjusted using the VOL ② control.Pressing the button will first display the bass adjustment (BAS:on the display panel),then treble adjustment (TRE: will appear on the display), balance (BAL:),fader(FAD:) and then volume (VOL:).The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

④. BASS CONTROL
Select the Bass mode by pressing the AUD button ③ so the BASS:indication

appears on the display panel. Within 5 seconds of choosing, turn the control counter clockwise to decrease the bass response or clockwise to increase it as desired. The level will be shown on the display panel from a minimum of BAS: -7 to a maximum of BAS: +7 (0 indicates flat response). The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

⑤.TREBLE CONTROL

Selet the Treble mode by pressing the AUD button ③ so the TRE: indication appears on the display panel. Within 5 seconds of choosing the Treble mode, rotate the VOL control ② counterclockwise to decrease the treble response or clockwise to increase it as desired. The level will be shown on the display panel from a minimum of TRE: -7 to a maximum of TRE: +7 (0 indicates flat response). The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

⑥. LEFT/RIGHT BALANCE CONTROL

To adjust the left-right speaker balance,first select the Balance mode by pressing the AUD button ③ so the BAL: indication appears on the display panel. Within 5 seconds of choosing the Balance mode, rotate the VOL control ② counter clockwise to adjust the stereo balance to the left channel speakers or clockwise to adjust it to the right channel speakers. The balance position will be shown on the display panel from BAL:L9 (full left) to BAL:R9(full right). When the volume level between the left and right speakers is equal, 0 will be shown on the display panel. The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

⑦. FRONT/REAR FADER CONTROL

To adjust the front-rear speaker balance, first select the Fader mode by pressing the AUD button ③ so the FAD: indication appears on the display panel. Within 5 seconds of choosing the Fader mode, rotate the VOL control ② clockwise to adjust the front-rear speaker balance to the front speakers or counterclockwise to adjust it to the rear speakers. The fader position will be shown on the display panel from FAD:R9(full rear) to FAD:F9(full front). When the level between the front and rear speakers is equal, 0 will be shown on the display panel.The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

⑧.LOUDNESS CONTROL

Pressing the AUD button for 2s will turn the Loudness ON/OFF.

⑨MANUAL UP/DOWN TUNING
(TUNE TRK+/TUNE TRK-)

Momentarily pressing and releasing either TUNE/TRK button will activate the manual tuning function, whereby FM stations may be selected in 200KHz increments, up or down and AM station may be in 10KHz increments. Pressing this button for 2s will activate the automatic seek. The radio will seek to the next station in the + or - direction and stop and remain at that frequency. During the upward or downward seek operation, LOC (local) appears on the display panel, and then disappears when a strong stereo station is encountered (ST appears on the display).

⑩.MONO/STEREO OPERATION

During FM radio operation, when the signal is broadcast in stereo, the stereo mode is indicated by the ST indication on the display panel. If the FM signal is broadcast in monaural instead of stereo, the stereo indication will disappear. The stereo indication will also disappear when the signal strength is greatly diminished, or when a station on either AM band is selected.

⑪.PRE=SET SCAN(PS)/AUTO-STORE TUNING(AS)

Press this button momentarily to scan the stations pre-set in each AM band and each FM band. The unit will stop at each pre-set station for approximately 5s before continuing to the next pre-set station (the pre-set station number on the display panel will flash during pre-set scan operation). Press the button again momentarily to stop pre-set scan operation and remain on the selected frequency. If no buttons are pressed during the scan, the unit will continue to scan the band In use. Pressing and holding the button for longer than 2s will activate the AUTO-STOR(AS)tuning feature which will automatically scan and enter up to 6 local area stations Into the pre-set memories on the band in use. If you have already set the pre-set memories to your favorite stations, activating the auto-store tuning feature will erase those stations and enter the new local ones. This feature is most useful when traveling in a new area where you are not familiar with the local stations.

⑫.STATION PRE-SET MEMORIES

To set any of the 6 preset memories in each band, use the following procedure:

1. turn the radio on and select the desired band.
2. Select the first station to be pre-set using the TUNE+/-(manual mode)or automatic seek tuning.
3. Press the preset button to be set and continue to hold it in for approximately 2s.

The pre-set number (M1-6) will appear on the display panel, indicating that the station is now set into that pre-set memory position. The station can now be recalled at any time by pressing that button.
4. Repeat the above procedure for the remaining 5 presets on that band and for the other 4 bands on the unit.

⑭.STATION SCAN SELECTOR(SCAN)
Press this button to automatically scan the FM or AM radio band in the upward direction. When a reasonably strong station is detected, the station frequency is displayed for 5 seconds. If no other button is pressed within this time frame, the scan operation resumes and stops at the next available station. This operation will continue until the SCAN button is pressed again to halt the scan mode.

⑮.WEATHER BAND (WB) BUTTON
The radio provides access to the weather band for local weather information. Press the WB button to switch the radio from AM/FM reception to the weather band. WB will appear on the display. Pressing the TUNE + or - button for more than 2s will search the weather band for the strongest signal. Pressing the TUNE + or TUNE - button will now access weather channels up or down. When the WB button is pressed again, radio operation returns to the previous FM or AM station, and WB1-7 disappears from the display. It is normal to receive only one station in a given locale due to the design of the Weather radio system.

⑯.CASSETTE DOOR
Hold the cassette with the exposed tape edge to the right and insert into the cassette door. Depress fully until the cassette is engaged and begins playing. TAPE and the tape directional arrow will appear on the display. When the cassette reaches the end on the side of the tape being played, the unit will automatically change direction of play as shown by the arrows on the display panel and play the other side of the cassette. NOTE: observe cassette operation cautions in the care and maintenance section of this manual

⑰.FAST-FORWARD BUTTON(▶▶)
pushing the fast-forward button will cause the tape to move rapidly in the forward direction of play; FAST will appear on the display panel. To stop fast-forward movement, lightly push the rewind button until the fast-forward button disengages; FAST will disappear from the display panel

⑱. REWIND BUTTON(◀◀)
Pushing the rewind button will cause the tape to move rapidly in the reverse

direction of play; FAST will appear on the display panel. To stop rewind movement, lightly push the fast- forward button until the rewind button disengages; FAST will disappear from the display panel

⑲.PROGRAM SELECTOR(PROG)
To manually reverse tape direction and play the other side of the cassette, lightly push both the fast-forward and rewind buttons at the same time. The change of direction will be shown by the arrows on the display panel.

⑳.EJECT BUTTON()
Tape playback is stopped and the cassette is ejected by pressing this button, which also has the function of switching over to radio operation.
NOTE: Do not leave a cassette engaged in the player when not in use. Doing so can cause damage to the cassette and/or mechanism of the unit. Always press the eject button and remove the cassette when leaving the vehicle

㉑.TIME/FREQUENCY SELECTOR(T/F)
During radio operation, press this button to call the frequency display on the quartz clock. Radio operation will continue uninterrupted. The time display will return 5 seconds later and will remain until another band and/or frequency is sleceted. The frequency/band display will appear for approximately 5s, and then revert to the time display as before.

㉒.AM/FM BAND SELECTOR(BAND)
During radio operation,each time this button is pressed, the radio band is changed. The indication AM1.AM2,FM1,FM2 or FM3 will appear on the display panel according to your selection. When FM reception is weak and/or AM1 or AM2 is selected, the stereo (ST) indication will disappear from the display.

㉓.MODE SELECTOR (MODE)BUTTON
This button is used to select the radio or the TAPE player playback and AUX mode. Each press of the button will select a different mode as indicated on the display panel.

SETTING THE CLOCK

1.Switch the vehicle ignition and radio "on" .
2.Press and hold the T/F button until the time (hour) display begins to flash.
3.With the hour display flashing, press the TUNE - button to decrement the hours indication, or the TUNE + button to increment the hour indication.
4.Press and hold the T/F button again until the minutes display begins to flash. Adjust the minutes display in the same manner described for the hours indication in step 3.
5.Five seconds after the last hour or minute adjustment is made, the time will be set into the unit and the time indication remains steady. To return to the frequency display, press the T/F button again;the display will return to the time indication.

CARE AND MAINTENANCE

The radio portion of your new sound system does not require any miantenance. We recommend you keep this maunal for general reference of the many features found in this unit.
As with any cassette player,the cassette section of this sound system does require a minimum of maintenance to keep it in good working condition. The following simple care and maintenance suggestions should be followed to prevent malfunctions of the cassette system.
1.Purchase a cassette cleaning kit from your local retail store. Use it! At least every 20 to 30 hours of operation you must clean the cassette mechanism. A dirty cassette player will have a poor sound.
2.Do not use cassettes that exceed 45 minutes of play on each side.
3.Do not insert a cassette that appears to be broken, twisted or dirty or with loose or torn labels on it.
4.Always keep your cassette away from direct sunlight or exposure to sub-freezing conditions. If a cassette is cold, allow it to warm up before use.
5.Do not keep a cassette in the player when not in use.
6.Before inserting a cassette in the player, check that the tape is tightly wound on the reels. Take up any excess slack using a pencil to turn the drive hub in the cassette.

AM AND FM RECEPTION IN A MOBILE ENVIRONMENT

Although you may be familiar with both AM and FM reception in your home, you will experience notable differences in reception while driving.Both AM and FM provide excellent listening enjoyment and supply the diversified entertainment necessary to relieve the boredom of hours behind the wheel. FM reception, although unique in its characteristics while driving, provides a different listening experience compared to that of AM.The few reception inconveniences common to FM are compensated by the rich sound quality of its wide frequency response and stereo effect.Your new AM/FM radio has been built to the strictest engineering standards available today and through quality components and construction will provide maximum performance under all conditions. A few minutes reading this section will enable you to obtain the most from the unit and answer your questions about the differences between mobile AM and FM reception.

SOME FACTS ABOUT AM AND FM RECEPTION

1.RECEPTION IN TUNNELS:Although you will lose AM reception when driving through tunnels and large bridges, it is common to continue to receive FM reception under the same conditions.
2.THE NUMBER OF STATIONS IN YOUR AREA: Depending on your location, you may find that you can receive a greater number of AM stations in your area than FM stations.In most urban and suburban areas,the numbers of AM and FM stations are comparable.
3.RECEPTION DURING STORMS: Local electrical thunderstorm activity often produces sharp static sound when listening to AM stations although you will find that FM is unaffected.
4.ELECTRICAL INTERFERENCE: When listening to AM stations,you may experience some buzzing sounds or static when passing roadside electric power lines which do not interfere with FM reception. Conversely, FM reception may be affected by electrical noise from passing cars and trucks while AM reception is not affected.
5.FM RECEPTION RANGE:FM reception range is usually limited to about 50 miles from the broadcast station. FM signals radiate straight out from the broadcast antenna and they do not follow the earth's curvature resulting in "line-of-sight" reception range.
6.AM RECEPTION RANGE: AM stations can often be received hundreds of miles from the broadcast station. AM signals follow the earth's curve and are easily reflected back to earth by the atmosphere. Therefore an AM signal may be more easily received far from the broadcast station antenna than an FM signal.

FM RECEPTION WHILE YOU ARE DRIVING

Since FM signals become weaker as you drive further from the broadcast station, you may experience flutter, noisy reception and fading in the poor signal fringe areas. Through the use of advanced circuitry in this radio,the "Fringe Area"has been greatly reduced, providing a larger reception range. Even with this improved circuitry however,eventually the FM signal will become too weak to provide quality reception. When this occurs, it is best to change to a stronger local FM station. Although FM signals are not reflected by the atmosphere, they are easily reflected by solid objects. This characteristic of FM signals can produce two different reception possibilities. First, an FM signal can "bounce" between tall buildings resulting in reception in areas where AM reception is not possible. Second,the same effect can result in the loss of an FM signal if a large obstruction such as a mountain or building is located between you and the FM broadcasting antenna so that it blocks the signals. In such cases, it is possible to have poor FM reception even if you are not far from the broadcasting station.

SPECIFICATIONS

Size:	2.08 ″ Hx7.25 ″ Wx6.25 ″ D 53mmx183mmx158mm
Operating Voltage:	12 Volts DC.Negative Ground
Output Power:	120 Watts Maximum(30 Wattsx4 Channels)
Output Wiring:	Floating-Ground Type Designed for Use with 4 Speakers (Front and Rear Channels Cannot be Combined (Bridged) for use with 2 Speakers)
Output Impedance:	Compatible with 4/8-Ohm Speakers
Tuning Range:	AM: 520-1720kHz(10kHz Steps) FM: 87.5-107.9MHz(200kHz Steps)
Sensitivity:	AM: 30dB μ V FM: 4.0dB μ V
Signal-to-Noise Ratio:	60 dB
FM Stereo Separation:	25 dB
IF Rejection:	FM 75 dB AM 45 dB
Image Rejection:	FM 55 dB AM 60 dB
Bass Control	±10dB@ 100kHz
Treble Control	±10dB@ 10kHz

Cassette Mechanism: Manual Reverse with Auto-Aligned Azimuth System
Tape S/N Radio: Epual to,or greater than,40dB
Separation: Equal to,or greater than,35dB

*Specifications are subject to change without notice.